ABSTRACT

THESIS: The Role of Anthocyanin as an Attractant in *Sarracenia leucophylla* Raf.

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DATE: May 2012

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Anthocyanin pigment and physical pitcher characteristics were directly proportional to captured prey mass by *Sarracenia leucophylla* Raf. Few experiments have been conducted to test the role of anthocyanin on insect capture in *Sarracenia*. Though the role of predation by *Sarracenia* on insects has long been known, the factors responsible for attraction of prey have yet to be fully evaluated. I sampled *S. leucophylla* leaves from both red and anthocyanin-free (green) subjects, including measuring pitcher height, mouth width and weighing dried prey mass. There were no significant differences in dried prey mass between red and green phenotypes. Prey mass was positively correlated to pitcher height as well as mouth width. Differences in nectary counts and pitcher temperature were also not statistically significant between red and green groups. This study did not find support for anthocyanin as a prey attractant, and nectar may play a more important role in prey attraction.